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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,365	02/17/2006	Scott Ranger	133697-0008	1883

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ANN ARBOR, MI 48104

EXAMINER
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AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
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3618

NOTIFICATION DATE	DELIVERY MODE
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09/23/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/552,365	<b>Applicant(s)</b> RANGER, SCOTT	
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/03/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

1. The abstract of the disclosure is objected to because "This invention relates to" should be deleted. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. In claim 2, applicants claim recitation "a rear edge line of the two front wheels coincides with a rear of a front edge of the battery" is unclear and renders the claim indefinite.

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4. In claim 5, "two pairs of upper/lower pivot" is indefinite because it is unclear what applicant is claiming (two pairs of upper pivots, two pairs of lower pivots or two pairs of upper and lower pivots). It is also suggested that applicant amend "pivot" to --pivots--.

5. In claim 6, "upper/lower connection parts" is indefinite because it is unclear what applicant is claiming.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finch et al. (US Patent 5,772,237) in view of Sauve (US Patent 6,851,498).

Finch et al. teaches an electric vehicle including: a frame/compartment (2, 2c); a seat (2b); two front wheels (3); two rear wheels (4), a driving device; a battery (see battery compartment 2c); a steering system (see col. 4, lines 7-9); and a front wheel suspension device (5, 6, 7), the frame (2, 2c) protrudes forward to form a casing at a middle position of a front end of the frame/compartment (2c) in which casing the battery is received, the front wheel suspension device (5, 6, 7) has a front convex shape and a rear concave shape covering a front end of the casing, and is pivotally joined (at 5c, 2g, 2f) at a middle position of the front end of the casing, and the two front wheels (3) installed on the front wheel suspension device (5, 6, 7); the vehicles including two

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protruding upper/lower connection parts that are provided at a middle of the front end of the casing; two pairs of upper and lower pivot joint parts provided on the connection parts (5d); a pair of front upper cantilevers (7); a pair of front lower cantilevers (6); and a vibration damper (13), front ends of the front upper and lower cantilevers (6, 7) are connected to pivot joint parts (5) along a longitudinal axis of the electric vehicle, rear ends of the cantilevers extend towards a side rear to a side of the frame casing, the left and front cantilevers and right and front cantilevers are connected with left and right ball head pins at the rear of the cantilevers, left and right axles (see Fig. 3) are provided on the left and right ball head pins and rotationally support the left and right front wheels (3), the damper (13) is provided near the rear of the cantilevers (6, 7), with one end of the damper (13) connected to the frame (2, 2c) and another end of the damper (13) connected to the cantilevers (7); the front cantilevers at the left and the front at the right form a trapezoid. The casing has a downward facing concave cavity in which the battery is received.

. Finch et al. is silent regarding the connection of the steering system.

Sauve teaches a steering system connected to the front end of a frame and interlocked with front wheels. The steering system includes left and right lateral bars, a steering shaft and a steering handle, the steering shaft is rotationally provided at the front of the frame and interlocks with the left and right axles via the lateral bars. RE claims 6-8, see Figure 3.

Based on the teachings of Sauve, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made to connect the

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steering system to the front end of the frame and interlock it with the front wheels to facilitate movement of the left and right front wheels. RE claim 2, it would have been obvious to one having ordinary skill in the art to position the front wheels closer to the front edge of the battery to create a more compact vehicle. RE claim 5, it would have been obvious to one having ordinary skill in the art, to fixedly attach the rear cantilever (at 2f) to limit vertical movement of the wheels for safety. Re claim 9, the provision of an I-shaped bracket mere represents a change in shape which is well within the level of ordinary skill in the art.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Triplett shows an electric vehicle.

Kruse shows a personal mobility vehicle.

Yamamoto shows a front wheel suspension for small motor vehicle.

Edmondson shows a personal transporter having multiple independent wheel drive.

Mulhern shows a bi-directional anti-tip system for powered wheelchairs.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Thursday from 8:00AM to 5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis, can be reached on 571-272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Christopher P Ellis/  
Supervisory Patent Examiner, Art  
Unit 3618

/Bridget Avery/

Examiner, Art Unit 3618